

1.	Record Nr.	UNISALENTO991002776229707536
	Titolo	Religioni e sette nel mondo : Rivista trimestrale di cultura religiosa / Gris. Gruppo di Ricerca e di Informazione sulle sette. . - 1995-
	Pubbl/distr/stampa	Bologna, 1995-
	ISSN	1123-4814
	Altri autori (Enti)	Gruppo di Ricerca e di Informazione sulle sette
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Periodico
2.	Record Nr.	UNINA9911049197703321
	Autore	Leitsch Alexander
	Titolo	First-Order Schemata and Inductive Proof Analysis / / by Alexander Leitsch, David Michael Cerna, Anela Lolic
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Birkhäuser, , 2026
	ISBN	3-032-05741-8
	Edizione	[1st ed. 2026.]
	Descrizione fisica	1 online resource (427 pages)
	Collana	Computer Science Foundations and Applied Logic, , 2731-5762
	Altri autori (Persone)	CernaDavid Michael LolicAnela
	Disciplina	004.0151
	Soggetti	Computer science Logic, Symbolic and mathematical Computational complexity Reasoning Set theory Computer Science Logic and Foundations of Programming Mathematical Logic and Foundations Computational Complexity Formal Reasoning Set Theory
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

Nota di contenuto

1. Introduction -- 2. Schemata and Point Transition Systems -- 3. Term schemata and formula schemata -- 4. Term Schemata and Unification -- 5. Proof schemata -- 6. Proof schemata and arithmetic -- 7. Cut-Elimination and the Method CERES -- 8. Schematic CERES (completely new - improves former publications) -- 9. An Application of Schematic CERES -- 10. Schematic Reasoning in GAP -- 11. Conclusion.

Sommario/riassunto

Schemata are formal tools for describing inductive reasoning. They opened a new area in the analysis of inductive proofs. The book introduces schemata for first-order terms, first-order formulas and first-order inference systems. Based on general first-order schemata, the cut-elimination-by-resolution (CERES) method—developed around the year 2000—is extended to schematic proofs. This extension requires the development of schematic methods for resolution and unification which are defined in this book. The added value of proof schemata compared to other inductive approaches consists in the extension of Herbrand's theorem to inductive proofs (in the form of Herbrand systems, which can be constructed effectively). An application to an analysis of mathematical proof is given. The work also contains and extends the newest results on schematic unification and corresponding algorithms. Core topics covered: first-order schemata cut-elimination by resolution point transition systems schematic resolution Herbrand systems inductive proof analysis This volume is the first comprehensive work on first-order schemata and their applications. As such, it will be eminently suitable for researchers and PhD students in logic and computer science either working or with an interest in proof theory, inductive reasoning and automated deduction. Prerequisites are a firm knowledge of first-order logic, basic knowledge of automated deduction and a background in theoretical computer science. Alexander Leitsch and Anela Lolic are affiliated with the Institute of Logic and Computation of the Technische Universität Wien, <David M. Cerna with the Czech Academy of Sciences, Institute of Computer Science (Ústav informatiky AV R, v.v.i.).
